

Design Criteria

As stated in the verifiable evidence statement, Sprint is designing its PCS network to provide wireless coverage to the residential area in Grafton and along George Washington Highway (Route 17). Ideally, Sprint would prefer to collocate antennas on an existing structure rather than propose a new structure. Give the unavailability of a suitable structure to collocate, Sprint searched for other possible locations for a new facility. The site proposed at Dare Elementary meets Sprint's design requirements to provide PCS service within the designated area.. Sprint's RF engineers have determined that the antennas must be located at the proposed height of 127 feet in order to achieve the level of coverage to connect to the adjacent sites.

Sprint selected this property and located the tower site as to minimize its visual impact on the adjacent properties. The site is located in the back part of the property in the leftfield corner at the edge of the woods. Furthermore, the design is to build a monopole tower to provide a structure that is believed to have less of a visual impact than a self-supporting lattice tower. This tower is designed to accommodate additional future collocation for additional carriers.